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## ABSTRACT

3        Systems and methods for providing a mixture of drilling fluid  
4        and beads into a flow of drilling fluid, e.g., flowing in a conduit  
5        or flowing upwardly within an annulus of a riser, the method in  
6        certain aspects including: introducing an initial stream including  
7        a mixture of drilling fluid and beads into a hydrocyclone;  
8        processing the initial stream with the hydrocyclone producing a  
9        first stream and a second stream, the first stream containing  
10       drilling fluid and beads and the second stream containing drilling  
11       fluid; and feeding the first stream to shale shaker apparatus  
12       and/or to centrifugal liquid/liquid separator apparatus producing  
13       a primary stream and a secondary stream, the primary stream  
14       including beads and drilling fluid; and feeding the primary stream  
15       into the conduit or into an annulus of the riser.  
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